

QUICK-DONNING FULL FACE OXYGEN MASK  
WITH INFLATABLE HARNESS AND SOFT FOLDABLE LENS

ABSTRACT OF THE DISCLOSURE

A mask and harness system for use in providing breathing oxygen and protection from pollutants for the eyes and respiratory system as might be encountered in high altitude aviation environments. In one preferred embodiment, the mask system has a face seal, a soft flexible lens, a pneumatically-actuated harness, and a regulator with microphone to control the flow of oxygen and to facilitate communications in aircraft flight decks and other aircraft compartments. The system is designed for required five-second donning with one hand and because of the flexible lens, is capable of storage in the relatively preferred on crowded flight decks. It is connected to an oxygen source and, optionally, with aircraft communications. The regulator controls the flow rate of oxygen to the wearer based on altitude and physiological requirements. The regulator includes a valve for purging the condensation-prone moist gases from the lens area and provides positive pressure in the mask. A second preferred embodiment molds the lens and mask seal of a single material having sufficient optical quality and flexibility to accomplish both purposes.